15<sup>th</sup> Annual Government Financial Management Conference

# Achieving Financial Management Improvements with XBRL\*

August 10, 2005

Reginald Nosegbe

**Director** 

PricewaterhouseCoopers' Washington Federal Practice



<sup>\*</sup>connectedthinking

#### **Presentation Outline**

- > Financial Management Challenges
- What is XML?
- ➤ What is XBRL? And How Does it enable Financial Management Improvements?
- Application of XBRL- A Solution driven Approach
- Closing Thoughts
- Reference Materials

## **Challenges**

### Existing Systems

- Disparate systems, data formats, and processes
- 62% of systems are at the end of their useful life <sup>1</sup>

### Systems Modernization

- Back office integration
- Systems implementation

### New Regulations and Requirements

- Internal Controls—OMB Circular A 123
- Accelerated Reporting Deadlines

### Human Capital

- 79% of financial workforce transaction processing activities <sup>2</sup>
- 4% of financial workforce decision support <sup>2</sup>

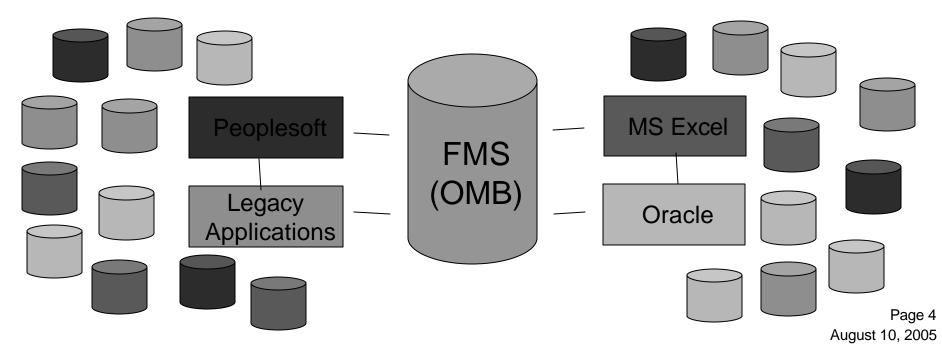
<sup>&</sup>lt;sup>1</sup>http://www.jfmip.gov/JFMIP/download/meeting/ForumSlides.ppt

<sup>&</sup>lt;sup>2</sup>JFMIP Whitepaper "Federal Financial Management Workforce of the Future," (Sept 2003)

## **Challenges - Disparate Systems and Applications**

Manually intensive, time-consuming, error prone, and expensive information processing and reporting across thousands of disparate systems

Non Integrated Budgetary, Financial, & Performance Systems



## **Solution Options**

## What are the solution options?

- ERP implementation
- Application integration
- XML
  - Proprietary schemas/taxonomies
  - Standards-based schemas/taxonomies (e.g. XBRL)

#### What is XML?

XML (Extensible Markup Language) is a revolutionary, open standard for document and data exchange, recommended by the W3C 1998

Application independent

Human and machine readability

Extensible

"E-Government initiatives" underway across the government are enabled by XML

#### XML Tagged Data

#### Plain, ordinary information

#### **Statement of Net Cost**

Program Total Net Cost

Program - Enhancement of Education
Intragovt Gross Costs 6,625
Less Intragovt Earned Rev 1,534
Intragovt Net Costs 5,090
Gross Costs with Public 26,060
Less: Earned Rev from Public 4,971
Net Costs with Public 21,088

26,179

#### Metadata: data about data

```
Metadata tags
<statement netcost>
cprogram>
 <name>Enhancement of Education</name>
 <costs>
   <intra_gross>6625</intra_gross>
   <intra earned rev>1534</intra earned rev>
   <intra net costs>5090</intra net costs>
   <public gross>26060</public gross>
   <public earned rev>4971</public earned rev>
   <public net costs>21088</public net costs>
 </costs>
</statement netcost>
```

## GAO Outlines Critical Risks Facing an Effective Government XML Implementation

- Incompatible data definitions, vocabularies, structures may proliferate
- The potential for proprietary extensions to be built that would defeat XML's goal of broad interoperability
- The burden of maintaining many data elements and definitions
- The need to maintain adequate security

## XBRL Mitigates Risks Facing XML Implementations

XBRL is designed to mitigate XML implementation risks outlined by GAO, thus accelerating financial management improvements

We will discuss how

#### What is XBRL?

XBRL (Extensible Business Reporting Language) is the XML-based universal standard for tagging and describing business information—account details, budgetary, financial and performance reporting

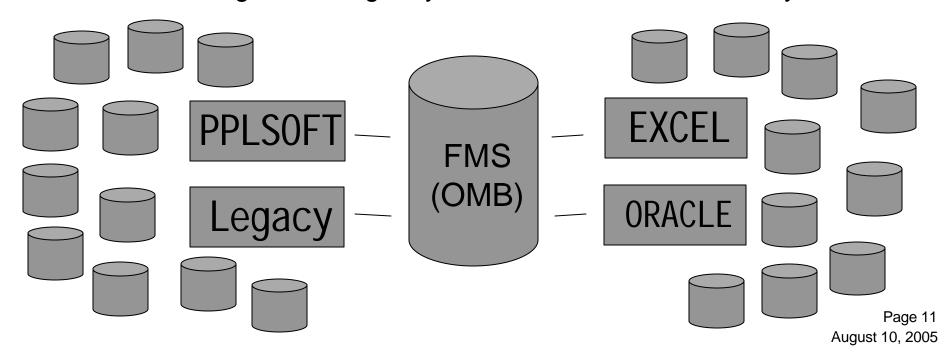
XBRL is maintained by XBRL International—comprised of over 250 entities (software vendors, accountants and auditors, governments, corporation, analysts, etc) across the world

XBRL is a component of FEA's technical reference model

#### **XBRL Provides "Barcoded Containers" to Transport Data**

- XBRL extends XML, and like XML, it is a markup language for "tagging" data
- XBRL is not software or hardware; merely standard tags

Data-level Integrated Budgetary, Financial, & Performance Systems



## XBRL—Optimized for FEA's Financial Management LOB

FEA Business Reference Model

Four Business Areas

\_\_\_\_ 39 Lines of business \_\_\_\_\_153 Sub functions

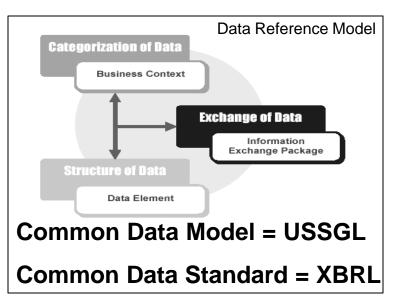
Our Focus

Business Area: Management of Government Resources

Line of Business: Financial Management

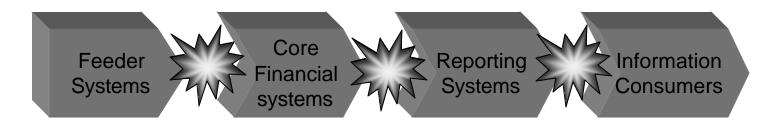
#### Sub Areas:

- 1. Accounting
- 2. Budget and Finance
- 3. Payments
- 4. Collections and Receivables
- 5. Asset & Liability Management
- 6. Reporting and Information



## Federal financial reporting supply chain

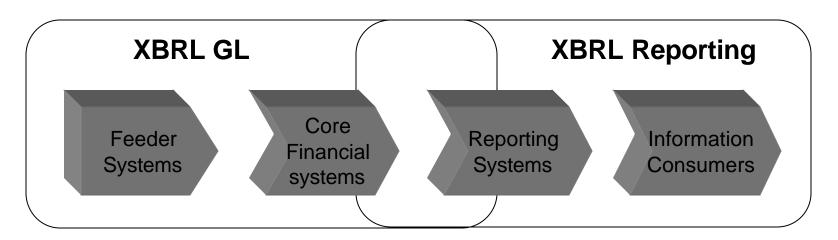
- Thousands of feeder systems (with multiple data formats) feed thousands of transactional/accounting information into multiple modules of the core financial system
- From trial balances, to financial reports, to operational reports--Multiple requests for reports (in various formats) are made to the core financial and feeder systems



 Imagine if you could achieve interoperability through data standardization, eliminating the burden of multiple mappings and disruptive systems changes each time a new requirement is introduced?

### Federal financial reporting supply chain

Achieve an interoperable and an efficient processing and reporting environment using XBRL



- XBRL addresses quality issues at the data level prior to aggregation and consolidation of budgetary, financial and performance information
- Taxonomies (account-level and reporting vocabularies) establishes relationships and context for each piece of data
- XBRL is designed to meet audit and controls requirements
- XBRL saves design time and increase future interoperability

## XBRL—XML Vocabulary Optimized to meet FEA Data Reference Model Expected Outcomes

- "Facilitates open/standards-based interoperability"
- "Establishes common data vocabulary and data standardization"
- "Supports ability to create cross-agency interoperable data architectures"
- "Facilitates systems integration and interoperability"
- "Promotes re-use of data components, as opposed to duplication"

## Standards-based Approach—Key to Achieving Financial Management Improvements

Old Paradigm

**Application & System Centric** 

**New Paradigm** 

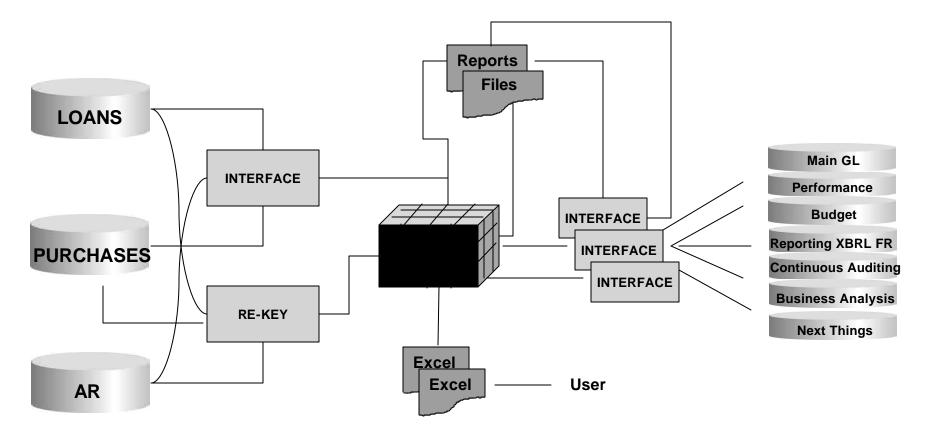
Standards & Data Centric

## Background

- Disparate financial systems must feed agency PeopleSoft general ledger
- Custom interfaces and a financial data warehouse were developed to consolidate and reorganize data to feed the core financial system in the U.S. Standard General Ledger (USSGL) format
- ➤ 1970's and 1980's era stovepipe systems, as well as changing federal regulations and program requirements present challenges for current data exchange and reporting

## The Challenge...

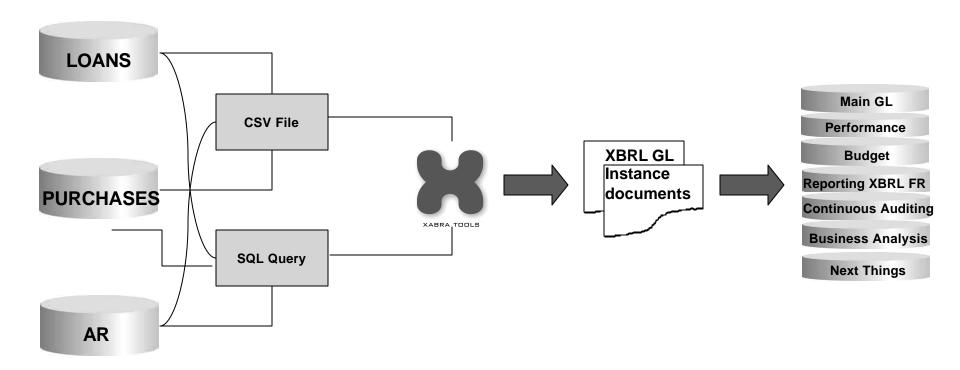
- >Effective cash management needs timely, complete, accurate data
- ➤ Current methods of data exchange are inefficient, error prone, and costly



> Easy access to detailed data and easy reuse isn't feasible

### The Solution

- One Standard Specification for Detail and Summary data.
- Use XBRL GL to exchange information between disparate subsidiary systems and the core financial system



Modular in design and built with reusability as an objective

## Recommendations to Accelerate the Achievement of Financial Management Improvements with XBRL

- Begin piloting the use of XBRL as a part of ongoing projects
  - Integration with current IT initiatives
  - Proof of Concept in actual reporting environment
  - Realization of tangible benefits
- Government-wide XBRL working group
  - Develop standardized taxonomies (budgetary, financial, and performance reporting)
  - Enable government-wide adoption

XBRL Web Services: How the US Government agencies can achieve an efficient budgetary, financial and performance reporting environment

XBRL International: <a href="http://www.xbrl.org">http://www.xbrl.org</a>

FFIEC XBRL Standard Focus Group: <a href="http://www.ffiec.gov/find/xbrlfocusgroup.htm">http://www.ffiec.gov/find/xbrlfocusgroup.htm</a>

Digitizing the USSGL and Account Details: The Advantages and Benefits of Using XBRL SEC XBRL Voluntary Filing Program: <a href="http://www.xbrl.org/us/secvfp/">http://www.xbrl.org/us/secvfp/</a>

PCAOB Guidance for Attestation Engagement Regarding XBRL:

http://www.pcaobus.org/News\_and\_Events/News/2005/05-25a.aspx

Standards-based Regulatory Reporting

To request copies of the whitepapers or for information on this presentation Contact Reginald Nosegbe at (202) 414-1678 or at reginald.nosegbe@us.pwc.com

## \*connectedthinking

